

Solving Multi-Step Equations:

$$3x - 5 = 22$$

$$\begin{array}{r} +5 \quad +5 \\ 3x - 5 = 22 \\ \hline 3x = 27 \end{array}$$

$$\frac{3x}{3} = \frac{27}{3}$$

$$x = 9$$

To get the x by itself, you will need to get rid of the 5 and the 3.

Get rid of addition and subtraction first.

Use the opposite order of PEMDAS

Then, we get rid of multiplication and division.

We check the answer by putting it back in the original equation:

Check:

$$3x - 5 = 22$$

We have that $x = 9$

$$3(9) - 5 = 22$$

$$27 - 5 = 22$$

$$22 = 22 \text{ (It checks!)}$$

Solve the Multi-Step Equations and check:

1) $9x - 11 = -38$ Check:	2) $160 = 7x + 6$ Check:
3) $32 - 6x = 53$ Check:	4) $\frac{3}{4}x - 11 = 16$ Check: $\frac{3}{4}x - 11 = 16$
5) $4x - 7 = -23$ Check:	6) $12x + 9 = -15$ Check:
7) $21 - 4x = 45$ Check:	8) $\frac{x}{7} - 4 = 4$ Check:
9) $\frac{-x}{6} + 3 = 7$ Check:	10) $26 = 60 - 2x$ Check: